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L28: Entry 47 of 60

File: USPT

Aug 13, 2002

DOCUMENT-IDENTIFIER: US 6431439 B1

TITLE: System and method for the electronic storage and transmission of financial transactions

Abstract Text (1):

An information storage and transmission device which captures handwritten and digital data relating to various financial transactions and stores the information when the transactions are made. The device can then wirelessly transmit this information to different terminal units, such as host PCs, ATMs, or terminal units used for point-of-sale transactions in order to facilitate the financial transaction and help a user track his financial transactions in an easier manner.

Brief Summary Text (2):

This invention relates to an information storage and transmission system, and more specifically to a method and system for storing financial transactions in a portable unit for later transmission to a terminal unit, such as a personal computer, an automatic teller machine (ATM), or a terminal used for other transactions, such as a terminal at a department store used for point-of-sale transactions.

Brief Summary Text (4):

In order to effectively use these software accounting applications, consumers need to keep accurate records of their daily financial transactions. In today's era of multiple different financial transactions, such as telebanking, ATM transactions, credit card transactions, and checking transactions, it has become increasingly difficult for a user to keep an accurate paper record of all of his financial transactions. In addition, even if a user was able to keep a paper copy of all of the deposit slips, ATM receipts, sales receipts, and check registers, he must still type all of this information into the software accounting program to make use of the tools provided by the software accounting program.

Brief Summary Text (6):

Most users are equally interested in tracking other financial transactions in addition to check writing. For example, when a user deducts money from his account using an ATM machine, he would also like to record that transaction. As described above, the user may again desire to input this data into the software accounting program on his personal computer so the accounting program can produce graphical and tabular data about his finances. Once again the user must manually input the data relating to the ATM transaction, such as the account number and the amount of the withdrawal, into the software accounting package. In addition, when a user travels to a department store, he may wish to make a note of any credit-card transactions and record these transactions so that he can manually enter the transactions into his software accounting program. A user must also record financial information at a point-of-sale, e.g., a store or other place of business. For the same reasons discussed above, the user may wish to electronically record this information so that he can later transfer it to a host PC or other terminal unit. In addition, a user may wish to purchase items from a vendor who demands immediate payment. The vendor may also, for example, not wish to pay merchant fees associated with a credit card or other transaction method that does not immediately transfer funds to his account.

Brief Summary Text (9):

Other conventional hardware products which include an accounting system include personal digital assistants (PDAs) and organizers. The PDAs are handheld computer-based systems which are programmed to run a variety of applications programs, such as Pocket Quicken. To access the accounting system on these devices, the user must press a series of keys on a keypad or use an expensive touch screen to scroll through a list of options. After selecting the accounting program, the user may manual input his account and financial transaction information using a miniature keypad. As discussed below, these devices do not allow the financial information stored on them to be easily transferred to a PC or other system for later processing.

Brief Summary Text (10):

Other hardware products use read only memory (ROM) devices to store their applications so that the programs which are stored on these products cannot be easily changed or updated. Like the PDAs described above, these products also run software accounting applications like Pocket Quicken. These products, like PDAs also require that the user manually input all of the financial data using a keypad. In addition, these products also do not allow information stored on them to be easily transferred to a PC or other system for later processing. Therefore, it is desirable to provide a system and method for electronically entering handwritten and digital data about a plurality of financial transactions into a handheld computer which may be integrated with other financial data recorders, such as a checkbook, to limit the number of items a user must carry when making financial transactions.

Brief Summary Text (11):

Once a user has stored information about financial transactions in a handheld unit, he may want to transfer this information to a terminal unit, which may be a PC, an ATM, or any other terminal unit. If the terminal unit is connected to a relational database, it can provide many accounting capabilities to non-PC users. In addition, it is advantageous to enter financial transactions information into a PC for several reasons. The PC generally has more processing power and can run accounting application programs, like Quicken or Excel, more quickly and efficiently than a hand-held accounting system. A PC is also more easily connected (and in fact may be permanently connected) to other PCs over a network and can share information and programs among many systems and users. In addition, a PC has more memory and can store more application programs which allows the financial transaction information to be manipulated by different software applications. The additional memory means that the memory does not have to be constantly dumped to accommodate more data, as with portable accounting systems. Thus, PCs are needed if accounting systems are to be used to their full advantage, and the ability to transfer financial transaction data to PCs is an unavoidable part of high-powered accounting systems.

Brief Summary Text (12):

In general, neither PDAs nor financial accounting hardware products allow the user to easily transfer information stored on them to the PC or other terminal unit. In most instances, the user must attach a cable to the hardware product and the PC or other terminal unit, and then enter a series of commands on the product's keypad. The product then transmits the data. After the data has been transferred, the user must detach the cable from the product and the PC or other terminal unit. Some products can accommodate data transfer between themselves and a PC or another terminal unit using an infrared (IR) adapter to wirelessly link the product to the PC similar to a television remote control unit but the user must enter a series of instructions to transmit the data.

Brief Summary Text (18):

In another aspect of the invention, the device may comprise a transceiver, e.g., such as an infrared (IR) transceiver, for wireless communication between the device

and a terminal unit, such as a personal computer, an ATM, or a terminal at a merchant's site. An IR adapter may be plugged into the terminal unit's serial, parallel, Universal Serial Bus (USB), or IrDA port to receive data from the device. The device can thus, for example, transfer information about a financial transaction to accounting programs running on the PC. Because the IR adapter is part of the device, a separate cable does not have to be attached to and removed from the device. This allows the user to more quickly and easily communicate with the terminal unit.

Drawing Description Text (18):

FIGS. 17a-b show an example of the information displayed when the Information Storage Device is used to make a withdrawal from an ATM account;

Detailed Description Text (3):

FIG. 1 is a block diagram of a portable, hand-held information storage and transmission device 10 in accordance with the invention that may be connected to a plurality of remote terminal units, such as an automatic teller machine (ATM) 20, a host PC 30, and a point-of-sale terminal 40 located at a merchant's site. The portable, hand-held device may also be referred to as an information storage device. The device 10 may communicate various financial transaction data to and receive similar data from each of these terminal units. In fact, the device 10 may be used with any computer-based system which can communicate data with the device. As discussed more fully below, the user may enter ATM transaction information, such as a personal identification number (PIN) and a transaction amount, into the device 10 and transmit the information from the device 10 to the ATM 20 so that the user may perform ATM functions (e.g., withdraw money, transfer money between accounts, and deposit money) using the device 10. The information about the ATM transaction is also stored on the device 10 so that this information can later be transmitted to a PC or other terminal units for later processing.

Detailed Description Text (4):

As another example, the device 10 may also communicate with the host PC 30. The device 10 may, for example, store all of the financial transactions that a user performed during a predetermined period, such as writing a check, withdrawing money from an ATM 20 or performing a point-of-sale transaction at a point-of-sale terminal 40. The user may then transmit the transaction data to the host PC 30 for use in a financial application program such as Quicken, Money Manager, or Excel.

Detailed Description Text (11):

As needed or when the memory in the device 50 is full, the user may transmit this electronic information about the financial transactions to a remote unit, such as a host PC using the transmission port 95 to communicate the data to the remote unit. The transmission port may be an IR communications port. Once downloaded to the host PC, the financial transaction data may be processed by his financial planning program.

Detailed Description Text (29):

These various transactions are discussed briefly below. The Information Storage Device may also be used for other financial transactions, such as ATM or POS transactions, and the invention is not limited to the financial transaction processes shown in FIGS. 7a and 7b. The Information Storage Device may also be used to complete home banking transactions through a variety of different electronic communications paths since the Information Storage Device may perform home banking transactions using an ATM terminal, a POS terminal or an electronic kiosk. For any of these different financial transactions, the user may enter information into the Information Storage Device and then wirelessly transmit the information to a financial institution through a merchant's terminal, which may be an ATM terminal, a POS terminal or an electronic kiosk.

Detailed Description Text (30):

The financial institution may then execute the financial transaction based on the information transmitted to it and provide the merchant and the Information Storage Device with an electronic receipt of the financial transaction. In this manner, using the Information Storage Device a paperless financial transaction may occur without a ATM or debit or credit card.

Detailed Description Text (38):

FIG. 9 is a flowchart of a method 600 that may be executed, for example in a Windows environment, on a remote terminal, such as a Host PC, for communicating with the Information Storage Device. The method initializes and creates Windows menus data files, and performs other housekeeping chores in step 610. Next, the program initializes hardware and software ports and the IR wireless communications adapter (IrDA) in step 615. Next, the program polls the IR adapter to see if the Information Storage Device has any data to transfer in step 620. If there are no messages to transfer, other tasks such as background processes, which may be other applications programs running on the PC, may be performed. While running these background processes, the PC continually checks to see if messages from the Information Storage Device are waiting in step 620. If there is a message waiting from the Information Storage Device, the program will translate the message to a format it understands, send the message to the applications program it is intended for, and runs the applications program. It then enters the Windows Message Loop (discussed below), and checks whether another message is waiting to be sent to it in step 620. If no more messages are waiting to be sent to it, the program exits the Main Loop in step 640. Now, a background process will be described.

Detailed Description Text (47):

To wirelessly communicate with a PC, ATM, terminal unit, or Internet-connected device, a user may lay his Information Storage Device on a table, lining up the IR LED with the PC's IR window. The PC initiates communications with the Information Storage Device, correlating the Unit ID with user data programs. If the PC recognizes the Unit ID, it allows the user to transmit data into his area and run application programs. When the transfer is complete, the user may remove his Information Storage Device from the table. Then, a second user may line up his Information Storage Device with the PC's IR window to transmit data to the PC using the same process.

Detailed Description Text (53):

FIGS. 17a-b show the LCD information that may be displayed when a user uses the Information Storage Device to make an ATM withdrawal. The user may first press the <ATM> key 65. The LCD 96 can then display the items shown in FIG. 17a including the date, balance, the type of transaction (ATM W/D), and blank areas for the amount to be filled in. The user then enters a PIN (e.g., 2222). If this PIN is correct, the user presses the <Enter> key 92 to store this data in the Information Storage Device. Next, using the numeric keypad, the user enters the amount of the withdrawal, (\$120.00). He presses <Enter> key 92 to confirm the amount of the withdrawal and to transmit this data from the Information Storage Device to the ATM and to receive account information from the ATM. LCD 96 can now display the information shown in FIG. 17b, including the amount of the withdrawal (\$120.00) and the new balance (\$1415.97). This information may now be stored in a transaction record in the memory of the device.

Field of Search Class/SubClass (2):

235/379

US Reference US Original Classification (2):

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US Reference US Original Classification (9):

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US Reference US Cross Reference Classification (3) :  
235/379

US Reference Group (2) :  
4417136 19831100 Rushby et al. 235/379

US Reference Group (3) :  
4737911 19880400 Freeman, Jr. 235/379

US Reference Group (9) :  
5594226 19970100 Steger 235/379

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File: USPT

Oct 23, 2001

DOCUMENT-IDENTIFIER: US 6305603 B1

**\*\* See image for Certificate of Correction \*\***TITLE: Personal digital assistant based financial transaction method and systemAbstract Text (1):

A personal digital assistant (PDA) based financial transaction method and system. The invention allows for convenient access to financial account(s) from a store and allows for financial transactions and immediate account updates via a PDA.

Brief Summary Text (3):

The present invention relates generally to financial electronic transactions and, in particular, to convenient electronic financial transactions and financial account(s) access with immediate account updates via a personal digital assistant (PDA).

Brief Summary Text (5):

Heretofore, credit cards, automated teller machine (hereafter "ATM") cards and so called smart cards have been used to purchase products and services without the use of cash. Unfortunately, the before mentioned cards suffer from a number of disadvantages. First, they do not provide the ability to use multiple accounts to pay for a transaction. Second, some cards such as credit cards or smart cards do not require an electronic signature or password for access to a users account. Hence, if lost or stolen, the card holders assets can be lost. Third, the above-mentioned cards do not provide feedback for record keeping other than a purchase receipt. The card user, therefore, must remember to enter the amount of purchases into his/her account register and update the account balance. Balance maintenance and budgeting, therefore, are burdensome.

Brief Summary Text (8):

In a first general aspect of the present invention is provided a method comprising the steps of: accessing at least two financial accounts at at least one financial institution using a personal digital assistant, performing at least one financial transaction during accessing using the personal digital assistant, and transmitting from each financial institution to the personal digital assistant updated information regarding each financial account. The present invention provides a number of advantages over related art devices. First, the process allows access to accounts with immediate updated feedback from the financial institution(s) accessed. This allows the user to access more than one account at one time if necessary and immediately see updated account balances on the personal digital assistant. Hence, the user receives more accurate account information. Additionally, prior to proceeding with a financial transaction, the PDA user may be provided with current financial account information so as to prevent overdrafts and allow for budgeting. Another advantage is found in how the retail institution or other transaction processor would receive immediate payment for goods or services, and potentially without providing a check out clerk or other service representative. Payment would be provided automatically by the PDA user before exiting the store. Accordingly, usage of the present invention could ultimately lead to lower costs to a transaction processor.

Brief Summary Text (12):

A fifth general aspect of present invention provides a program storage device readable by a machine, tangibly embodying a program of instructions executable by the machine to perform the method steps for executing a financial transactions between computer systems, the method steps comprising: accessing at least two financial accounts at at least one financial institution using a personal digital assistant, performing at least one financial transaction during accessing using the personal digital assistant, and transmitting from each financial institution to the personal digital assistant updated information regarding each financial account. This aspect provides a mechanism of storage for instructions to carry out the process outlined above.

Detailed Description Text (3):

A "personal digital assistant" (hereinafter "PDA") is defined as a hand held microcomputer designed for individual use and includes at least a local central processing unit (CPU), a touch screen (or other equivalent user interface such as a keypad, a screen with mouse, voice recognition system, or pen-based input, etc.), memory for storing information, and input/output capability for reading and writing information. The I/O capability may be to various cards such as smart cards, magnetic cards, or optical cards, etc. The PDA may also include a microphone, a modem, a serial port and/or a parallel port so as to provide direct communication capability with peripheral devices, e.g., point of sale (POS) and automated teller machine (ATM) terminals, and capability for transmitting or receiving information through wireless communications such as radio frequency (RF) and infrared (IR) communications. Examples of such devices are an International Business Machine (IBM) Workpad.RTM. or an Apple Newton.RTM..

Detailed Description Text (5):

A "transaction processor" or "store" is any establishment in which a person pays for products, services, etc. It is important to recognize that while the term "store" is used throughout to describe the subject invention, the teachings of the invention, as they relate to an establishment receiving payment, are applicable to any establishment that receives payment and should not be limited to a traditionally defined "store." For instance, internet commerce, websites, ATM machines, stock markets or brokers, car rental companies, etc. are all considered "transaction processors" or "stores." In some instances, the establishment may be both a store and a financial institution, e.g., stock brokers.

Detailed Description Text (6):

Referring to FIG. 1, a representative hardware environment for practicing the present invention is depicted that illustrates a typical hardware configuration of a PDA based financial transaction system in accordance with the subject invention. The system includes a personal digital assistant (PDA) 10 such as an IBM Workpad.RTM.. PDA 10 is communicative via mechanism 12 to a transaction processor's or store's computer system 20 and, in particular, to any one of a number of communication ports or kiosks 14A, 14B, 14C, 14D, 14E, etc. that may be positioned anywhere throughout a store. Communication mechanism 12 can take a variety of forms that allow electronic communication. For instance, wiring. If PDA 10 has wireless communication capabilities, then communication mechanism 12 may include a compatible receiver/transmitter 16, e.g., an infra-red data communication port.

Detailed Description Text (7):

Store computer system 20 would include a CPU, ROM, RAM and assorted input/output devices. Store computer system 20 would also include networked kiosks 14A-14E. Store computer system 20 can also electronically connect, e.g., via modem or wide area system, to any number of financial institution computer systems 30, 32, 34 in which the PDA user and/or store has at least one account.

Detailed Description Text (8):

Turning to FIGS. 2-3, the overall processes involved with the present invention are illustrated. In step S1 of FIG. 2, PDA 10 initiates payment transfer at a

conveniently located kiosk 14A-14E in the store. That is, PDA 10 is electronically communicative with store computer system 20 via wired or wireless communication via kiosk 14A-14E. At this point, payment information such as the cost of the product or services is entered. This information may be inputted into either PDA 10, or store computer system 20 directly via kiosk 14A-14E, in a number of ways. For instance, the price can be entered via a keyboard or more preferably via conventional bar code reader scanning. Once a final financial transaction total has been obtained, it is reported to the PDA 10 user, i.e., if inputted into a kiosk 14A-14E, kiosk 14A-14E transfers the transaction amount to PDA 10.

Detailed Description Text (9):

In step S2, the PDA user chooses the financial account or accounts and amount to debit from each to cover the amount of the financial transaction. The financial account(s) can be at a single financial institution or a number of financial institutions. The selections would be presented on the output device of PDA 10 and selectable by the user as desired. For instance, PDA 10 may include a touch screen, a screen with mouse, a pen-based system, a keypad, or voice recognition system, etc., for item selection by the user. Input of amounts to be debited to each financial account could be provided with the same selection mechanisms.

Detailed Description Text (10):

In step S3, a determination as to whether the financial transaction amount has been covered by the selections is performed. If the transaction is incomplete, the process loops until selections are made by the PDA user to cover the total amount of the financial transaction. If the final transaction total has been covered by the selections, the process proceeds to step S4 where a user enters an account access approval indication such as passwords, personal identification numbers (PIN), voice recognition approval, etc., for each account selected to be debited. The store may also have in memory an account access approval indication for each of its accounts that would be accessed for transfer to the respective financial institution.

Detailed Description Text (11):

In step S5, account accessing and communication processes with financial institution computer system(s) 30, 32, 34, etc. by an executing computer system, are illustrated. The financial institution computer systems 30, 32, 34, etc. access is determined, in part, by which financial institution accounts the PDA user designates to be debited and also by which financial institution accounts the store designates to access. For example, if the store and PDA user have accounts at the same financial institution, a minimum of two accounts will be accessed, or if the store and PDA user each designate more than one account at more than one financial institution, a minimum of four accounts may be accessed. Communication with each financial institution is to be in parallel such that simultaneous electronic financial transactions can occur. It is important to note, however, that membership in standardized financial transaction programs, e.g., CIRRUS.RTM., MAC.RTM., NYCE.RTM., etc., could reduce the necessary number of financial institutions accessed.

Detailed Description Text (12):

The executing computer system may be either store computer system 20, PDA 10 or financial institute computer 30, 32, 34, etc., i.e., software execution for the actual financial transaction may take place in any system. Preferably, however, the executing computer system would be either financial institute computer system 30, 32, 34, etc. or store computer system 20 based on their probable higher storage capacity and performance parameters as compared to PDA 10. Most preferably, store computer system 20 is the executing computer system.

Detailed Description Text (13):

Referring to FIG. 3, the details of step S5 are illustrated. At step S6, financial institution computer system 30, 32, 34 receives a request for transaction from the



executing computer system, e.g., PDA 10 or store computer system 20. This request (s) would include the inputted account access approval indications for each account to be accessed. As is conventional, all information communicated is encrypted. For instance, a 128 bit encryption key, dynamic encryption system (DES), etc. can be used to assure security. Alternatively, a secure virtual private network system (VPN) is also possible.

Detailed Description Text (14):

In step S7, financial institution computer system(s) 30, 32, 34 receive encryption keys from PDA 10 and store computer system 20. In step S8, the encryption keys are returned or transmitted to PDA 10 and store computer system 20.

Detailed Description Text (15):

In step S9, the current account(s) information is transmitted to PDA 10. This information advantageously would include at least current account(s) balance(s) and possibly all past transactions, i.e., account transaction history, which may or may not have been recorded by the PDA user. If account transaction history is desired, the number of days, weeks, months, etc. of history to be obtained can be set by the PDA user. Hence, the user can be apprized of current account balances and, if desired, determine paper transactions that have not yet cleared by reviewing the account transaction history. These provisions allow the PDA user to have the most up to date information before completing any final transactions. In a preferred embodiment, PDA 10 includes a financial account tracking database that is used to maintain and track financial accounts activity and balances. This database would be updated by the current account(s) information. However, it is also possible that at the PDA user's choosing (e.g., for security reasons), PDA 10 would not have information stored thereon and all account information would be transferred from the financial institution(s) upon use. In this case, PDA 10 would act as a terminal. Information regarding a store account(s) can also be sent to store computer system 20, if desired.

Detailed Description Text (16):

In step S10, the encrypted transaction parameters are received by financial institution computer system(s) 30, 32, 34. Transaction parameters may include, for example, transaction amount, account information, type of transaction (e.g., debit, transfer, credit), etc. Further, for some transactions, such as those requiring financial status verification (e.g., mortgages, car loans, etc.), other PDA user account information could be transferred to the store.

Detailed Description Text (17):

In step S11, a return commit request is sent to PDA 10 for a two-step or two-phase transaction committal from the PDA user. It should be recognized that the committal does not necessarily have to require two phases and may take the form of any committal indication desired by the PDA user, store and/or financial institution. For instance, a password or PIN, voice recognition, handwriting recognition, alphanumeric signal, etc. can be used.

Detailed Description Text (18):

In step S12, the financial transaction is performed. More specifically, the committal confirmation from PDA 10 is received and the financial transaction is performed. That is, the amount(s) selected from each financial account(s) of the PDA user to cover the amount of the financial transaction is transferred to the designated store account(s).

Detailed Description Text (19):

Next, in step S13, a transmittal from each financial institution to PDA 10 of updated information regarding each financial account is provided. In particular, a completed transaction notification is sent back to PDA 10 with the current account (s) information of the PDA user. After step S13, connection between store computer system 20 and the financial institution computer system(s) 30, 32, 34 can be

discontinued.

Detailed Description Text (20):

Returning to FIG. 2, the overall process continues with step S14 where current account(s) information is transferred back to PDA 10 via store computer system 20 connection with PDA 10, assuming store computer system 20 is the executing computer. Otherwise, current account(s) information is sent directly to PDA 10. In step S15, the account(s) information is displayed on PDA 10 and the financial transaction is applied to a PDA database to update its records if PDA 10 has such capabilities. Hence, an automatic account register can be created. In step S16, the PDA user is queried as to whether more transactions are desired. If yes, the system loops back to step S2. Otherwise, the process is completed.

Detailed Description Text (21):

As an additional last step (not shown), an encrypted receipt could be sent to PDA 10 for further record keeping and presentation to a store representative prior to departure. As an alternative, a receipt could also be printed at kiosks 14A-14E for presentation to a store representative upon departure or at a pick up area within the store.

Detailed Description Text (22):

The method and process of the subject invention allow access to financial account (s) with immediate updated feedback from the financial institution(s) accessed. This allows the user to access one account or more than one account at one time, if necessary, and immediately see updated account balances on PDA 10. For example, if a user were buying a \$1000 television, \$500 could be debited to a checking account, \$200 to a savings account, and \$300 to a Visa account simultaneously. The balances of each account would be presented to the PDA user prior to completion of the transactions and after completion of the transactions. The user therefore receives more accurate account information. Additionally, prior to proceeding with a financial transaction, the PDA user is provided with current financial account information so as to prevent overdrafts. A transaction processor or store, such as a retail institution, would receive immediate payment for goods or services. Further, the transaction processor or store could potentially eliminate the need for checkout clerks or other service representatives other than someone to check receipts of a PDA user upon departure from the store. Alternatively, paper receipts could be eliminated entirely, for example, by providing an electronic receipt displayed on the PDA for presentation to a store representative upon departure. Hence, the subject invention could drastically decrease store operation costs.

Detailed Description Text (24):

For instance, the invention can be implemented as set(s) of instructions (i.e., a software program) resident in the read only memory (ROM) of the executing computer system, e.g., PDA 10, store computer system 20 or financial institution computer system 30, 32, 34, etc. Alternatively, the set of instructions can be segmented between computer systems 10, 20, 30, etc. as necessary.

Detailed Description Text (25):

Until required, the set of instructions may also be stored in another computer readable memory, for example in a hard disk drive, or in a removable memory such as an optical disk for eventual use in a CD-ROM drive or a floppy disk for eventual use in a floppy disk drive. Further, the set of instructions can be stored in the memory of another computer and transmitted over a local area system or a wide area system, such as the Internet, when desired by the user. For instance, the set(s) of instructions may be stored in financial institution computer system(s) 30, 32, 34, etc. If the Internet is used, the set(s) of instructions can be transferred directly to the executing computer system, i.e., PDA 10 or store computer system 20, as necessary. One skilled in the art would appreciate that the physical storage of the set(s) of instructions physically changes the medium upon which it is stored electrically, magnetically, or chemically so that the medium carries computer

✓ readable information.

Detailed Description Text (26):

Furthermore, the teachings of the present invention of immediately updating a PDA financial account database after a financial transaction may be applied in circumstances other than a debiting-type financial transaction without limitations. For instance, the present invention may be used for account transfers, e.g., transferring more funds between accounts or to a smart card. Transfers could occur prior to a debiting financial transaction, e.g., after the PDA user receives the current account information, or without a debiting financial transaction occurring. Further, the present invention could be used for situations where the establishment is both a financial institution and store as defined herein, e.g., a sale of stock by the PDA user, with transfer of proceeds to other accounts at the stock brokers or elsewhere.

Issued US Original Classification (1):

235/379

Field of Search Class/SubClass (1):

235/379

CLAIMS:

1. A method comprising the steps of:

identifying a product to be purchased;

accessing at least two financial accounts, each of the accounts having at least one of funds and credit for the purchase of the product, at at least one financial institution using a personal digital assistant;

performing at least one financial transaction during accessing using the personal digital assistant; and

transmitting from each financial institution to the personal digital assistant updated information regarding each financial account.

3. The method of claim 1, wherein the step of accessing includes transmitting an account access approval indication to the at least one financial institution for each account from the personal digital assistant.

6. The method of claim 1, further comprising the step of displaying the updated information for each account on the personal digital assistant.

7. The method of claim 1, wherein the step of accessing includes the personal digital assistant communicating with the financial institution via a store computer system.

8. The method of claim 7, wherein the step of transmitting includes transmitting the updated information to the personal digital assistant via the store computer system.

9. The method of claim 2, further comprising the step of entering a transaction amount into one of the personal digital assistant and the store computer system, wherein the transaction amount includes the price the buyer will pay for the product.

12. The method of claim 9, wherein the step of accessing includes transmitting from the financial Institution to the personal digital assistant at least one of, current account balances account transaction history and information for updating a

database of the personal digital.

16. The method of claim 1, wherein the step of accessing a financial account requires at least one transaction approval indication from the personal digital assistant.

20. A program storage device readable by a machine, tangibly embodying a program of instructions executable by the machine to perform the method steps for executing a financial transactions between computer systems, the method steps comprising:

a) accessing at least two financial accounts of a user of a personal digital assistant and a store account at at least one financial institution using the personal digital assistant;

b) performing at least one financial transaction during accessing using the personal digital assistant; and

c) transmitting from each financial institution to the personal digital assistant updated information regarding each financial account.

21. The method of claim 1, wherein the receipt provided to the buyer is an electronic receipt displayed on the PDA for presentation to a store representative upon the buyer's departure from the store.

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